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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Sreenivasan et al.  
App. No.: 10/670,980 GPAU: 1722  
Filing Date: 09/25/2003 Examiner: Nguyen, Thukhanh  
Dkt. No.: P100-42-03 Conf. No.: 8096  
For: IMPRINT LITHOGRAPHY TEMPLATE HAVING OPAQUE ALIGNMENT MARKS

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Commissioner for Patents  
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Sir:

The following information is submitted in compliance with Applicants' duty of disclosure and pursuant to 37 C.F.R. § 1.56, § 1.97 and § 1.98. The undersigned brings the patents, publications, applications or other information identified in the attached:

- ☒ Form(s) PTO/SB/08A and/or PTO/SB/08B or PTO/1449  
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to the Examiner's attention in the above-identified application. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed:

before the mailing date of a first Office action on the merits or before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114. Therefore, no fee is believed required.

Applicant(s) does not believe that any additional fees are due, but if the Commissioner believes additional fees are due,

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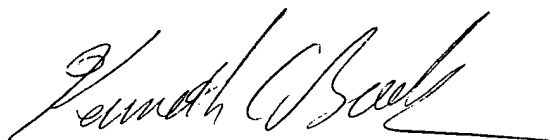
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Signed: Katrina Prati

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Date: 1-14-05

Respectfully Submitted,



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of

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## Complete if Known

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First Named Inventor	Sreenivasan et al.
Group Art Unit	1722
Examiner Name	Nguyen, Thukhanh
Attorney Docket Number	P100-42-03

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	B1	3,527,062		Belinski et al.	09-08-1970	
	B2	3,783,520		King	01-08-1974	
	B3	3,807,027		Heisler	04-30-1974	
	B4	3,807,029		Troeger	04-30-1974	
	B5	3,811,665		Seelig	05-21-1974	
	B6	4,062,600		Wyse	12-13-1977	
	B7	4,070,116		Frosch et al.	01-24-1978	
	B8	4,098,001		Watson	07-04-1978	
	B9	4,119,688		Hiraoka	10-10-1978	
	B10	4,155,169		Drake et al.	05-22-1979	
	B11	4,201,800		Alcorn et al.	05-06-1980	
	B12	4,202,107		Watson	05-13-1980	
	B13	4,267,212		Sakawaki	05-12-1981	
	B14	4,326,805		Feldman et al.	04-27-1982	
	B15	4,337,579		De Fazio	07-06-1982	
	B16	4,355,469		Nevins et al.	10-26-1982	
	B17	4,414,750		De Fazio	11-15-1983	
	B18	4,426,247		Toshiakai et al.	01-17-1984	
	B19	4,440,804		Milgram	04-03-1984	
	B20	4,451,507		Beltz et al.	05-29-1984	
	B21	4,507,331		Hiraoka	03-26-1985	
	B22	4,544,572		Sandvig et al.	10-01-1985	
	B23	4,552,832		Blume et al.	11-12-1985	
	B24	4,552,833		Ito et al.	11-12-1985	
	B25	4,600,309		Fay	07-15-1986	
	B26	4,610,442		Oku et al.	09-09-1986	
	B27	4,657,845		Frechet et al.	04-14-1987	
	B28	4,692,205		Sachdev et al.	09-08-1987	
	B29	4,694,703		Routson	09-22-1987	
	B30	4,707,218		Giammarco et al.	11-17-1987	
	B31	4,724,222		Feldman	02-09-1988	
	B32	4,731,155		Napoli et al.	03-15-1988	
	B33	4,737,425		Lin et al.	04-12-1988	
	B34	4,763,886		Takei	08-16-1988	
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		Number	Kind Code <sup>2</sup> (if known)			
	B35	4,772,878		Kane	09-20-1988	
	B36	4,808,511		Holmes.	02-28-1989	
	B37	4,826,943		Ito et al.	05-02-1989	
	B38	4,846,931		Gmitter et al.	07-11-1989	
	B39	4,848,179		Ubhayakar	07-18-1989	
	B40	4,848,911		Uchida et al.	07-18-1989	
	B41	4,857,477		Kanamori	08-15-1989	
	B42	4,883,561		Gmitter et al.	11-28-1989	
	B43	4,887,283		Hosno	12-12-1989	
	B44	4,891,303		Garza et al.	01-02-1990	
	B45	4,908,298		Hefferon et al.	03-13-1990	
	B46	4,909,151		Fukui et al.	03-20-1990	
	B47	4,919,748		Bredbenner et al.	04-24-1990	
	B48	4,921,778		Thackeray et al.	05-01-1990	
	B49	4,929,083		Brunner	05-29-1990	
	B50	4,931,351		McColgin et al.	06-05-1990	
	B51	4,959,252		Bonnebat et al.	09-25-1990	
	B52	4,964,145		Maldonado	10-16-1990	
	B53	4,964,945		Calhoun et al.	10-23-1990	
	B54	4,976,818		Hashimoto et al.	12-11-1990	
	B55	4,980,316		Huebner	12-25-1990	
	B56	4,999,280		Hiraoka	03-12-1991	
	B57	5,053,318		Gulla et al.	10-01-1991	
	B58	5,063,321		Carter	11-05-1991	
	B59	5,071,694		Uekita et al.	12-10-1991	
	B60	5,072,126		Progler	12-10-1991	
	B61	5,073,230		Maracas et al.	12-17-1991	
	B62	5,074,667		Miyatake	12-24-1991	
	B63	5,108,875		Thackeray et al.	04-28-1992	
	B64	5,110,514		Soane	05-05-1992	
	B65	5,126,006		Cronin et al.	06-30-1992	
	B66	5,148,036		Matsugu et al.	09-15-1992	
	B67	5,148,037		Suda et al.	09-15-1992	
	B68	5,151,754		Ishibashi et al.	09-29-1992	
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		Number	Kind Code <sup>2</sup> (if known)			
	B69	5,155,749		DiMilia et al.	10-13-1992	
	B70	5,169,494		Hashimoto et al.	12-08-1992	
	B71	5,171,490		Fudim	12-15-1992	
	B72	5,173,393		Sezi et al.	12-22-1992	
	B73	5,179,863		Uchida et al.	01-19-1993	
	B74	5,198,326		Hashimoto et al.	03-30-1993	
	B75	5,204,739		Domenicali	04-20-1993	
	B76	5,206,983		Guckel et al.	05-04-1993	
	B77	5,212,147		Sheats	05-18-1993	
	B78	5,218,193		Miyatake	06-08-1993	
	B79	5,234,793		Sebald et al.	08-10-1993	
	B80	5,240,550		Boehnke et al.	08-31-1993	
	B81	5,240,878		Fitzsimmons et al.	08-31-1993	
	B82	5,242,711		DeNatale et al.	09-07-1993	
	B83	5,244,818		Jokerst et al.	09-14-1993	
	B84	5,259,926		Kuwabara et al.	09-09-1993	
	B85	5,270,984		Mine	12-14-1993	
	B86	5,277,749		Griffith et al.	01-11-1994	
	B87	5,314,772		Kozicki et al.	05-24-1994	
	B88	5,318,870		Hartney	06-07-1994	
	B89	5,324,683		Fitch et al.	06-28-1994	
	B90	5,328,810		Lowrey et al.	07-12-1994	
	B91	5,330,881		Sidman et al.	07-19-1994	
	B92	5,348,616		Hartman et al.	09-20-1994	
	B93	5,355,219		Araki et al.	10-11-1994	
	B94	5,357,122		Okubora et al.	10-18-1994	
	B95	5,362,606		Hartney et al.	11-08-1994	
	B96	5,366,851		Novembre	11-22-1994	
	B97	5,374,454		Bickford et al.	12-20-1994	
	B98	5,376,810		Hoenk et al.	12-27-1994	
	B99	5,380,474		Rye et al.	01-10-1995	
	B100	5,392,123		Marcus et al.	02-21-1995	
	B101	5,414,514		Smith et al.	05-09-1995	
	B102	5,417,802		Obeng	05-23-1995	
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		Number	Kind Code <sup>2</sup> (if known)			
	B103	5,421,981		Leader et al.	06-06-1995	
	B104	5,422,295		CHOI et al.	06-06-1995	
	B105	5,424,549		Feldman	06-13-1995	
	B106	5,425,848		Haisma et al.	06-20-1995	
	B107	5,425,964		Southwell et al.	06-20-1995	
	B108	5,431,777		Austin	07-11-1995	
	B109	5,439,766		Day et al.	08-08-1995	
	B110	5,452,090		Progler et al.	09-19-1995	
	B111	5,453,157		Jeng	09-26-1995	
	B112	5,458,520		DeMercurio et al.	10-17-1995	
	B113	5,468,542		Crouch	11-21-1995	
	B114	5,480,047		Tanigawa et al.	01-02-1996	
	B115	5,504,793		Chen	04-02-1996	
	B116	5,507,411		Peckels	04-16-1996	
	B117	5,508,527		Kuroda et al.	04-16-1996	
	B118	5,512,131		Kumar et al.	04-30-1996	
	B119	5,515,167		Ledger et al.	05-07-1996	
	B120	5,523,878		Wallace et al.	06-04-1996	
	B121	5,527,662		Hashimoto et al.	06-18-1996	
	B122	5,545,367		Bae et al.	08-13-1996	
	B123	5,563,702		Emery et al.	10-08-1996	
	B124	5,566,584		Briganti	10-22-1996	
	B125	5,633,505		Chung et al.	05-27-1997	
	B126	5,654,238		Cronin et al.	08-05-1997	
	B127	5,669,303		Maracas et al.	09-23-1997	
	B128	5,670,415		Rust	09-23-1997	
	B129	5,700,626		Lee et al.	12-23-1997	
	B130	5,723,176		Keyworth et al.	03-03-1998	
	B131	5,724,145		Kondo et al.	03-03-1998	
	B132	5,725,788		Maracas et al.	03-10-1998	
	B133	5,726,548		Chiba et al.	03-10-1998	
	B134	5,731,981		Simard	03-24-1998	
	B135	5,736,424		Prybyla et al.	04-07-1998	
	B136	5,743,998		Park	04-28-1998	
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	B137	5,747,102		Smith et al.	05-05-1998	
	B138	5,753,014		Van Rijn	05-19-1998	
	B139	5,760,500		Kondo et al.	06-02-1998	
	B140	5,772,905		Chou	06-30-1998	
	B141	5,776,748		Singhvi et al.	07-07-1998	
	B142	5,779,799		Davis	07-14-1998	
	B143	5,785,918		Hull	07-28-1998	
	B144	5,802,914		Fassler et al.	09-08-1998	
	B145	5,804,474		Sakaki et al.	09-08-1998	
	B146	5,808,742		Everett et al.	09-15-1998	
	B147	5,825,482		Nikooahadetal	10-20-1998	
	B148	5,855,686		Rust	01-05-1999	
	B149	5,876,550		Feygin et al.	03-02-1999	
	B150	5,877,036		Kawai	03-02-1999	
	B151	5,877,861		Ausschnitt et al.	03-02-1999	
	B152	5,884,292		Baker et al.	03-16-1999	
	B153	5,888,650		Calhoun et al.	03-30-1999	
	B154	5,895,263		Carter et al.	04-20-1999	
	B155	5,900,160		Whitesides et al.	05-04-1999	
	B156	5,907,782		Wu	05-25-1999	
	B157	5,912,049		Shirley	06-15-1999	
	B158	5,926,690		Toprac et al.	07-20-1999	
	B159	5,937,758		Maracas et al.	08-17-1999	
	B160	5,942,871		Lee	08-24-1999	
	B161	5,948,219		Rohner	09-07-1999	
	B162	5,948,470		Harrison et al.	09-07-1999	
	B163	5,948,570		Kornblut et al.	09-07-1999	
	B164	5,952,127		Yamanaka	09-14-1999	
	B165	5,988,859		Kirk	11-23-1999	
	B166	6,033,977		Gutsche et al.	03-07-2000	
	B167	6,035,805		Rust	03-14-2000	
	B168	6,036,055		Mogadam et al.	03-14-2000	
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				Application Number	10/670,980
				Filing Date	09/25/2003
				First Named Inventor	Sreenivasan et al.
				Group Art Unit	1722
				Examiner Name	Nguyen, Thukhanh
Sheet	6	of	23	Attorney Docket Number	P100-42-03

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	B171	6,046,056		Parce et al.	04-04-2000	
	B172	6,051,345		Huang	04-18-2000	
	B173	6,074,827		Nelson et al.	06-13-2000	
	B174	6,081,334		Brimbergen et al.	06-27-2000	
	B175	6,088,103		Everett et al.	07-11-2000	
	B176	6,091,485		Li et al.	07-18-2000	
	B177	6,096,655		Lee et al.	08-01-2000	
	B178	6,117,708		Wensel	09-12-2000	
	B179	6,125,183		Jiawook et al.	09-26-2000	
	B180	6,128,085		Buermann et al.	10-03-2000	
	B181	6,133,576		Shafer et al.	10-17-2000	
	B182	6,137,562		Masuyuki et al.	10-24-2000	
	B183	6,143,412		Schueller et al.	11-07-2000	
	B184	6,150,231		Muller et al.	11-21-2000	
	B185	6,150,680		Eastman et al.	11-21-2000	
	B186	6,168,845	B1	Fontana, Jr. et al.	01-02-2001	
	B187	6,180,239	B1	Whitesides et al.	01-30-2001	
	B188	6,182,042	B1	Peevers	01-30-2001	
	B189	6,188,150	B1	Spence	02-13-2001	
	B190	6,204,922	B1	Chalmers	03-20-2001	
	B191	6,218,316	B1	Marsh	04-17-2001	
	B192	6,234,379	B1	Donges	05-22-2001	
	B193	6,245,213	B1	Olsson et al.	06-12-2001	
	B194	6,245,581	B1	Bonser et al.	06-12-2001	
	B195	6,274,294	B1	Hines	08-14-2001	
	B196	6,309,580	B1	Chou	10-30-2001	
	B197	6,316,290	B1	Wensel	11-13-2001	
	B198	6,326,627	B1	Putvinski et al.	12-04-2001	
	B199	6,329,256	B1	Ibok	12-11-2001	
	B200	6,334,960	B1	Willson et al.	01-01-2002	
	B201	6,337,262	B1	Pradeep et al.	01-08-2002	
	B202	6,355,198	B1	Kim et al.	03-12-2002	
	B203	6,361,831	B1	Sato et al.	03-26-2002	
	B204	6,383,928	B1	Eissa	05-07-2002	
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				Attorney Docket Number	P100-42-03
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		Number	Kind Code <sup>2</sup> (if known)			
	B205	6,387,783	B1	Furukawa et al.	05-14-2002	
	B206	6,387,787	B1	Mancini et al.	05-14-2002	
	B207	6,388,253	B1	Su	05-14-2002	
	B208	6,391,217	B1	Schaffer et al.	05-21-2002	
	B209	6,391,798	B1	DeFelice et al.	05-21-2002	
	B210	6,407,340	B1	Wikstrom et al.	06-18-2002	
	B211	6,407,340	B1	Wikstrom	06-18-2002	
	B212	6,411,010	B1	Suzuki et al.	06-25-2002	
	B213	6,420,892	B1	Krivy et al.	07-16-2002	
	B214	6,423,207	B1	Heidari et al.	07-23-2002	
	B215	6,437,891	B1	Chandrasekhar et al.	08-20-2002	
	B216	6,447,919	B1	Brown et al.	09-10-2002	
	B217	6,455,411	B1	Jiang et al.	09-24-2002	
	B218	6,467,761	B1	Amatucci et al.	10-22-2002	
	B219	6,482,742	B1	Chou	11-19-2002	
	B220	6,489,068	B1	Kye	12-03-2002	
	B221	6,495,624	B1	Brown, James F.	12-17-2002	
	B222	6,514,672	B2	Young et al.	02-04-2003	
	B223	6,517,977	B2	Resnick et al.	02-11-2003	
	B224	6,518,168	B1	Clem et al.	02-11-2003	
	B225	6,521,324	B1	Debe et al.	02-18-2003	
	B226	6,522,411	B1	Moon et al.	02-18-2003	
	B227	6,534,418	B1	PLAT et al.	03-18-2003	
	B228	6,539,286	B1	Jiang	03-25-2003	
	B229	6,541,356	B2	Fogel et al.	04-01-2003	
	B230	6,541,360	B1	PLAT et al.	04-01-2003	
	B231	6,561,706	B2	Singh et al.	05-13-2003	
	B232	6,565,928	B2	Sakamoto et al.	05-20-2003	
	B233	6,580,505	B1	Bareket	06-17-2003	
	B234	6,588,632	B1	Nicol	07-08-2003	
	B235	6,600,969	B2	Sudolcan et al.	07-29-2003	
	B236	6,632,742	B2	Yang et al.	10-14-2003	
	B237	6,633,391	B1	Oluseyi et al.	10-14-2003	
	B238	6,635,581	B2	Wong	10-21-2003	
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				<b>Group Art Unit</b>	1722
				<b>Examiner Name</b>	Nguyen, Thukhanh
<b>Sheet</b>	8	<b>of</b>	23	<b>Attorney Docket Number</b>	P100-42-03

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		Number	Kind Code <sup>2</sup> (if known)			
	B239	6,646,662	B1	Nebashi et al.	11-11-2003	
	B240	6,677,252	B2	Marsh	01-13-2004	
	B241	6,696,157	B1	David et al.	02-24-2004	
	B242	6,696,220	B2	Bailey et al.	02-24-2004	
	B243	6,703,190	B2	Elian et al.	03-09-2004	
	B244	6,713,238	B1	Chou et al.	03-30-2004	
	B245	6,716,767	B2	Shih et al.	04-06-2004	
	B246	6,719,915	B2	Willson et al.	04-13-2004	
	B247	6,730,256	B1	Bloomstein et al.	05-04-2004	
	B248	6,753,972	B1	Hirose et al.	10-28-1999	
	B249	6,737,202	B2	Gehoski et al.	05-18-2004	
	B250	6,743,713	B2	Mukherjee-Roy et al.	06-01-2004	
	B251	6,767,983	B1	Fujiyama et al.	07-27-2004	
	B252	6,770,852	B1	Steger	08-03-2004	
	B253	6,776,094	B1	Whitesides et al.	08-17-2004	
	B254	6,777,170	B1	Bloomstein et al.	08-17-2004	
	B255	6,805,054	B1	Meissl et al.	10-19-2004	
	B256	2001/0023829	A1	Olsson et al.	09-27-2001	
	B257	2001/0040145	A1	Willson et al.	11-15-2001	
	B258	2002/0069525	A1	Hada et al.	06-13-2002	
	B259	2002/0093122	A1	Choi et al.	07-18-2002	
	B260	2002/0094496	A1	Choi et al.	07-18-2002	
	B261	2002/0098426	A1	Sreenivasan et al.	07-25-2002	
	B262	2002/0132482	A1	Chou	09-19-2002	
	B263	2002/0150398	A1	Choi et al.	10-17-2002	
	B264	2002/0167117	A1	Chou	11-14-2002	
	B265	2003/0080471	A1	Chou	05-01-2003	
	B266	2003/0081193	A1	White et al.	05-01-2003	
	B267	2003/0092261	A1	Kondo et al.	05-15-2003	
	B268	2003/0113638	A1	Mancini et al.	06-19-2003	
	B269	2003/0129542	A1	Shih et al.	07-10-2003	
	B270	2003/0133126	A1	Sarfaty et al.	07-17-2003	
	B271	2003/0179354	A1	Araki et al.	09-25-2003	
	B272	2003/0205657	A1	Voisin	11-06-2003	
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Application Number		10/670,980			
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First Named Inventor		Sreenivasan et al.			
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Attorney Docket Number		P100-42-03			
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	B273	2003/0205658	A1	Voisin	11-06-2003	
	B274	2003/0215577	A1	Willson et al.	11-20-2003	
	B275	2003/0235787	A1	Watts et al.	12-25-2003	
	B276	2004/0007799	A1	Choi et al.	01-15-2004	
	B277	2004/0008334	A1	Sreenivasan et al.	01-15-2004	
	B278	2004/0009673	A1	Sreenivasan et al.	01-15-2004	
	B279	2004/0010341	A1	Watts et al.	01-15-2004	
	B280	2004/0021254	A1	Sreenivasan et al.	02-05-2004	
	B281	2004/0021866	A1	Watts et al.	02-05-2004	
	B282	2004/0022888	A1	Sreenivasan et al.	02-05-2004	
	B283	2004/0029041	A1	Shih et al.	02-12-2004	
	B284	2004/0036201	A1	Chou et al.	02-26-2004	
	B285	2004/0038552	A1	Watts et al.	02-26-2004	
	B286	2004/0046271	A1	Watts	03-11-2004	
	B287	2004/0053146	A1	Sreenivasan et al.	03-18-2004	
	B288	2004/0065252	A1	Sreenivasan et al.	04-08-2004	
	B289	2004/0065976	A1	Sreenivasan et al.	04-08-2004	
	B290	2004/0086793	A1	Sreenivasan et al.	05-06-2004	
	B291	2004/0089979	A1	Rubin	05-13-2004	
	B292	2004/0090611	A1	Choi et al.	05-13-2004	
	B293	2004/0104641	A1	Choi et al.	06-03-2004	
	B294	2004/0112153	A1	Choi et al.	06-14-2004	
	B295	2004/0112861	A1	Choi et al.	06-17-2004	
	B296	2004/0112862	A1	Willson et al.	06-14-2004	
	B297	2004/0116548	A1	Willson	06-17-2004	
	B298	2004/0124566	A1	Sreenivasan et al.	07-01-2004	
	B299	2004/0141163	A1	Bailey et al.	07-22-2004	
	B300	2004/0141168	A1	Sreenivasan et al.	07-22-2004	
	B301	2004/0146792	A1	Nimmakayala et al.	07-29-2004	
	B302	2004/0149687	A1	Choi et al.	08-05-2004	
	B303	2004/0150129	A1	Hougham et al.	08-05-2004	
	B304	2004/0163563	A1	Sreenivasan et al.	08-26-2004	
	B305	2004/0168586	A1	Bailey et al.	09-02-2004	
	B306	2004/0168588	A1	Choi et al.	09-02-2004	
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	B320	DE	19648844		Muller et al.	09-18-1997		
	B321	DE	2800476		Lamprecht et al.	07-13-1978		
	B322	EP	0867775		Shinji	09-30-1998		
	B323	EP	244884		Ponjee	03-03-1987		
	B324	EP	733455		Anderhub et al.	09-25-1996		
	B325	JP	02192045		Mineo et al.	07-27-1990		
	B326	JP	02-24848		Kamio	01-26-1990		
	B327	JP	02-92603		Kurikawa	04-03-1990		
	B328	JP	1-196749		Matsumoto et al.	08-08-1989		
	B329	JP	4-70379		Unknown	05-01-1992		
	B330	JP	55-88332		Masahiro	07-04-1980		
	B331	JP	57-7931		Hirakawa et al.	01-16-1982		
	B332	JP	58-129074		Takeda	08-01-1983		
	B333	JP	63-138730		Koji	06-10-1988		
	B334	WO	00/21689		Chou et al.	04-20-2000		
	B335	WO	00/54107		Willson et al.	09-14-2000		
	B336	WO	01/33232		Andeen et al.	05-10-2001		
	B337	WO	01/33300		Choi	05-10-2001		
	B338	WO	01/47003	A2	Steiner et al.	06-28-2001		
	B339	WO	01/53889		Ling et al.	07-26-2001		
	B340	WO	01/63361		Heidari et al.	08-30-2001		
	B341	WO	01/69317		Montelius et al.	09-20-2001		
	B342	WO	01/79589		Hallberg	10-25-2001		
	B343	WO	01/79591		Hallberg et al.	10-25-2001		
	B344	WO	01/79592		Hallberg et al.	10-25-2001		
	B345	WO	01/79933		Heidari	10-25-2001		
	B346	WO	01/90816		Heidari	11-29-2001		
	B347	WO	02/006902		Choi et al.	01-24-2002		
	B348	WO	02/008835		Choi et al.	01-31-2002		
	B349	WO	02/067055		Choi et al.	08-29-2002		
	B350	WO	02/17383		Choi et al.	02-28-2002		
	B351	WO	02/22916		Pettersson et al.	03-21-2002		
	B352	WO	02/24977		Bjarnason et al.	03-28-2002		
	B353	WO	87/02935		Long et al.	05-21-1987		
	B354	WO	92/17883		Olsson	10-15-1992		

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Complete if Known**

<b>Application Number</b>	10/670,980
<b>Filing Date</b>	09/25/2003
<b>First Named Inventor</b>	Sreenivasan et al.
<b>Group Art Unit</b>	1722
<b>Examiner Name</b>	Nguyen, Thukhanh
<b>Attorney Docket Number</b>	P100-42-03

Sheet

12

of

23

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	B358	Abstract of Japanese Patent 02-24848, January 26, 1990	
	B359	Abstract of Japanese Patent 02-92603, August 12, 2004	
	B360	Abstract of Japanese Patent 55-88332, April 14, 2004	
	B361	Abstract of Japanese Patent 57-7931, April 14, 2004	
	B362	Abstract of Japanese Patent 58-129074, August 01, 1983	
	B363	Abstract of Japanese Patent 63-138730, April 14, 2004	
	B364	ANANTHASURESH et al., "Strategies for Systematic Synthesis of Compliant Mems.", DSC-Vol. 55-2, Dynamic Systems and Control: Volume 2, pp. 677 – 686, November 1, 1994.	
	B365	ARAI et al., "Calibration and Basic Motion of Micro Hand Module.", IEEE, January 1, 1993, pp. 1660-1665.	
	B366	Arai et al., "Development of a New Parallel Manipulator with Fixed Linear Actuator.", In Proceedings of Japan/USA Symposium on Flexible Automation, January 1, 1996, Vol. 1, ASME, New York, pp. 145-149.	
	B367	"Photoresist Coating Methods.", E-mail from Susan Bagen (BAGEN@aol.com) to Dhaval Shah, September 18, 1997.	
	B368	BENDER et al., "Fabrication of Nanostructures using a UV-based Imprint Technique.", Microelectronic Engineering 53, January 1, 2000, pp. 233-236.	

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	B369	BENDER et al., "Multiple Imprinting in UV-based Nanoimprint Lithography: Related Material Issues.", Microelectronic Engineering 61 – 62, January 1, 2002, pp. 407-413.	
	B370	BLOMQUIST et al., "Fluorinated Acrylates in making Low-Loss, Low-Birefringence, and Single-Mode Optical Waveguides with Exceptional Thermo-Optic Properties.", SPIE Conference on Linear Optical Properties of Waveguides and Fibers, July 1, 1999, Vol. 3799, pp. 266-279.	
	B371	BRAEUER et al., "Precise Polymer Micro-Optical Systems.", MRS Bulletin, July 1, 2001, pp. 519-522.	
	B372	CHOI et al., "Design of Orientation Stages for Step and Flash Imprint Lithography.", Precision Engineering, January 1, 2001, pp. 192-199.	
	B373	CHOU et al., "Imprint Lithography with 25-Nanometer Resolution." Science Vol. 272, April 5, 1996, pp. 85-87.	
	B374	CHOU et al., "Imprint Lithography with Sub-10 nm Feature Size and High Throughput.", Microelectronic Engineering 35, January 1, 1997, pp. 237-240.	
	B375	CHOU et al., "Imprint of Sub-25 nm Vias and Trenches in Polymers.", Applied Physics Letter, November 20, 1995, 67 (21)	
	B376	CHOU et al., "Lithographically Induced Self-assembly of Periodic Polymer Micropillar Arrays.", J. Vac. Sci. Technol., November 1, 1999, B 17(6), pp. 3197-3202.	
	B377	CHOU et al., "Nanoimprint Lithography and Lithographically Induced Self-Assembly.", MRS Bulletin, July 1, 2001, pp. 512-517.	
	B378	CHOU, "Ultrafast and Direct Imprint of Nanostructures in Silicon, Nature, Vol. 417, (June 2002), pp. 835-837.	
	B379	COLBURN et al., "Step and Flash Imprint Lithography for sub-100 nm Patterning.", Proceedings of SPIE, January 1, 2000, Vol. 3997, pp. 453 – 457.	

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	B380	COLBURN et al., "Step and Flash Imprint Lithography: A New Approach to High-Resolution Patterning.", Proc of SPIE, Vol. 3676.	
	B381	COWIE, "Polymers: Chemistry and Physics of Modern Materials.", 2 <sup>nd</sup> Ed., January 1, 1991, pp. 408-409	
	B382	ELDADA et al., "Advanced Polymer Systems for Optoelectronic Integrated Circuit Applications.", SPIE, January 1, 1997, Vol. 3006, pp. 344 – 361.	
	B383	ELDADA et al., "Affordable WDM Components: The Polymer Solution.", SPIE, January 1, 1998, Vol. 3234, pp. 161-174.	
	B384	ELDADA et al., "Robust Photopolymers for MCM, Board, and Backplane Optical Interconnects.", SPIE, January 1, 1998, Vol. 3288, pp. 175 – 191.	
	B385	FELDMAN et al., "Wafer Chuck Magnification Correction in X-Ray Lithography.", J. Vac. Sci. Technol. B 16(6), November 1, 1998, pp. 3476 – 3479.	
	B386	FEYNMAN, "There's Plenty of Room at the Bottom." December 1959	
	B387	GOKAN et al., "Dry Etch Resistance of Organic Materials.", J. Electrochem. Soc.: SOLID-STATE SCIENCE AND TECHNOLOGY, January 1, 1983, pp. 143-146.	
	B388	GOLDFARB et al., "A Well-Behaved Revolute Flexure Joint for Compliant Mechanism Design.", ASME Journal of Mechanical Design, 09-01-1999, Vol. 121, No. 3, pp. 424-429	
	B389	GOLDFARB et al., "Compliant Micromanipulator Design for Scaled Bilateral Telemanipulation of Small-Scale Environments.", ASME International Mechanical Engineering Conference and Exposition, November 1, 1998, DSC-Vol. 64, pp. 213-218.	
	B390	HAISMA et al., "Mold-assisted Nanolithography: A Process for Reliable Pattern Replication.", J. Vac. Sci. Technol. B, November 1, 1996, pp. 4124-4128.	

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	B391	HASHIMOTO et al., "Design and Characteristics of a Parallel Link Compliant Wrist." IEEE, May 1, 1994, Department of Mechanical Engineering, Kagoshima University, pp. 2457-2462.	
	B392	HEIDARI, "Nanoimprint Lithography at the 6 in. Wafer Scale.", J. Vac. Sci. Technol. B 18 (6), November 1, 2000, pp. 3557 - 3560.	
	B393	HEXAPODS, "G1000-PS Power Series", <a href="http://www.hexapods.com">www.hexapods.com</a> , 10/12/1999	
	B394	HEXEL CORPORATION, "Tornado 2000 System Specifications.", <a href="http://www.hexel.com">www.hexel.com</a> , November 12, 1999.	
	B395	HIRAI et al., "Abstract of Mold Surface Treatment for Imprint Lithography", Journal of Photopolymer Science and Technology, August 28, 2001, pp 457-462, vol 14, No. 3	
	B396	HIRAI et al., "Mold Surface Treatment for Imprint Lithography.", Journal of Photopolymer Science and Technology, August 1, 2001, Vol. 14, No. 3, pp. 457-462.	
	B397	HOGAN et al., "Impedance Control: An Approach to Manipulation: Part 1- Theory.", Journal of Dynamic Systems, Measurement, and Control, March 1, 1985, Vol. 107, pp. 1-7.	
	B398	HOLLIS et al., "A Six-Degree-of-Freedom Magnetically Levitated Variable Compliance Fine-Motion Wrist: Design, Modeling, and Control.", IEEE Transactions on Robotics and Automation, June 1, 1991, Vol 7., No. 3, pp. 320 - 332.	
	B399	HOWELL et al., "A Loop-Closure Theory for the Analysis and Synthesis of Compliant Mechanisms.", Journal of Mechanical Design, March 1, 1996, Vol. 118, pp. 121-125.	
	B400	HU et al., "Fluorescence Probe Techniques (FPT) for Measuring the Relative Efficiencies of Free-Radical Photoinitiators.", Macromolecules, May 29, 1998, 31, pp. 4107-4113.	
	B401	International Search Report for PCT/US 00/30041, October 18, 2001.	

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	B402	International Search Report for PCT/US 01/26049, February 19, 2002	
	B403	JOHNSON et al., "Advances in Step and Flash Imprint Lithography.", SPIE Microlithography Conference, February 23, 2003.	
	B404	KANETOMO et al., "Robot for Use in Ultrahigh Vacuum.", Solid State Technology, August 1, 1997, pp. 63-72.	
	B405	KIM et al., "High-precision Magnetic Levitation Stage for Photolithography.", Precision Engineering, April 1, 1998, Vol 22., No. 2, pp. 66 – 77.	
	B406	KIM et al., "Surface Energy and Polarity of Treated Indium-Tin-Oxide Anodes for Polymer Light-Emitting Diodes Studied by Contact Angle Measurements.", Journal of Applied Physics, 1999, pp. 2774-2778, Vol. 86, No. 5.	
	B407	KOSEKI, "Design and Accuracy Evaluation of High-Speed and High Precision Parallel Mechanism.", Proc. Of IEEE, January 1, 1998, Intl. Conf. on Robotics & Automation, pp. 1340-1345.	
	B408	KOTACHI et al., "Si-Containing Positive Resist for ArF Excimer Laser Lithography.", Photopolymer Science and Technology, November 4, 1995, pp. 615 – 622.	
	B409	KRAUSS et al., "Fabrication of Nanodevices Using Sub-25 nm Imprint Lithography.", Appl. Phy. Lett., January 1, 1995, 67 (21), pp. 3114-3116.	
	B410	KRUG et al., "Fine Patterning of Thin Sol-gel Films.", Journal of Non-Crystalline Solids, January 1, 1992, 147 & 148, pp. 447-450.	
	B411	KUMAR et al., "Features of Gold Having Micrometer to Centimeter Dimensions can be Formed Through a Combination of Stamping with an Elastomeric Stamp and an Alkanethiol "ink" followed by Chemical Etching.", Applied Physics Letters, October 4, 1993, Vol. 63, Issue 14, pp. 2002-2004.	
	B412	LEE et al., "An Ultraprecision Stage for Alignment of Wafers in Advanced Microlithography.", Precision Engineering, September 1, 1997, pp. 113-122.	

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	B413	LEE et al., "Ultra Precision Positioning System for Servo Motor-piezo Actuator Using the Dual Servo Loop and Digital filter Implementation.", American Society for Precision Engineering, January 1, 1998, pp. 287-290.	
	B414	LIN, "Multi-Layer Resist Systems.", Introduction to Microlithography, February 14, 1983, pp. 287-349.	
	B415	LUCAS AEROSPACE, Free-Flex @ Pivot Catalog, January 1, 1999	
	B416	LUURTSEMA, "Spin Coating for Rectangular Substrates.", Retrieved 5/23/02 from URL: <a href="http://buffy.eecs.berkeley.edu/IRO/Summary/97abstracts/gluurts.2.html">http://buffy.eecs.berkeley.edu/IRO/Summary/97abstracts/gluurts.2.html</a> , May 23, 1992.	
	B417	MANSKY et al., "Large-Area Domain Alignment in Block Copolymer Thin Films Using Electric Fields.", Macromolecules, June 9, 1998, Vol. 31, No. 13, pp. 4399-4401.	
	B418	MARTIN et al., "Predication of Fabrication Distortions in Step and Flash Imprint Lithography Templates.", Journal of Vacuum Science. B 20(6) pp. 2891-2895, November 1, 2002.	
	B419	MERLET, "Parallel Manipulators: State of the Art and Perspectives.", Advanced Robotics, January 1, 1994, Vol. 8, pp. 589-596.	
	B420	MIRKIN et al., "Emerging Methods for Micro-and-Nanofabrication.", MRS Bulletin, July 1, 2001, pp. 506-509.	
	B421	MITSUI et al., "Application of Two-Wavelength Optical Heterodyne Alignment System in XS-1.", Part of the SPIE Conference on Emerging Lithographic Technologies III, March 1, 1999, SPIE Vol. 3676, pp. 455-464.	
	B422	MITTAL, "Precision Motion Control of a Magnetic Suspension Actuator Using a Robust Nonlinear Compensation Scheme.", IEEE/ASME Transactions on Mechatronics., December 1, 1997, Vol. 2., No. 4, pp. 268-280.	
	B423	NERAC.COM Retro Search, "Imprint Lithography." October 16, 2004.	

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	B424	NERAC.COM Retro Search, "Multi-Layer Resists.", September 2, 2004.	
	B425	NERAC.COM Retro Search, "Reduction of Dimension of Contact Holes.", August 31, 2004.	
	B426	NERAC.COM Retro Search, "Trim Etching of Features Formed on an Organic Layer.", September 2, 2004.	
	B427	NGUYEN, "Asymmetric Fluid-Structure Dynamics in Nanoscale Imprint Lithography." The University of Texas at Austin, August 1, 2001, pp. 1-111.	
	B428	OHYA et al., "Development of 3-DOF Finger Module for Micro Manipulation.", Proc. of IEEE, March 1, 1999, Intl. Conf. on Intelligent Robots and Systems, pp. 894-899.	
	B429	OTTO et al., "Characterization and Application of a UV-based Imprint Technique.", Microelectronic Engineering 57 – 58, January 1, 2001, pp. 361-366.	
	B430	PAPIRER et al., "Abstract of The Grafting of Perfluorinated Silanes onto the Surface of Silica: Characterization by Inverse Gas Chromatography.", Journal of Colloid and Interface Science 159, August 1, 1993, pp. 238-242.	
	B431	PARIKH et al., "An Intrinsic Relationship between Molecular Structure in Self-Assembled n-Alkylsiloxane Monolayers and Deposition Temperature.", Journal of Phys. Chem., July 1, 1994, pp. 7577-7590.	
	B432	PAROS et al., "How to design Flexure Hinges.", Machine Design, November 25, 1965, pp 151-156.	
	B433	PENG et al., "Compliant Motion Control of Kinematically Redundant Manipulators.", IEEE Transactions on Robotics and Automation, December 1, 1993, Vol. 9, No. 6, pp.831-837.	
	B434	PERNETTE et al., "Design of Parallel Robots in Microbotics.", Robotica, January 1, 1997, Vol. 15, pp 417-420.	

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				Group Art Unit	1722
				Examiner Name	Nguyen, Thukhanh
Sheet	20	of	23	Attorney Docket Number	P100-42-03

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	B435	PHYSIK INSTRUMENTS, "Hexapod Six-Axis Parallel Kinematics Robot", Nano Positioning, January 1, 1998, pp. 8.4 – 8.5.	
	B436	PHYSIK INSTRUMENTS, "NanoPositioning, MicroPositioning, Piezo Technology.", PI Online Catalog, January 1, 1999, www.physikinstruments.com.	
	B437	PHYSIK INSTRUMENTS, "Product Catalog for Micropositioning", 1997	
	B438	RAIBERT et al., "Hybrid Position/Force Control of Manipulators.", Journal of Dynamic Systems, Measurement, and Control, June 1, 1981, Vol. 102, pp. 126 – 133.	
	B439	RONG et al., "Design and Analysis of Flexure-Hinge Mechanism Used in Micro-Positioning Stages.", ASME, January 1, 1994, Vol. 2, pp. 979-985.	
	B440	RONG et al., "Dynamics of Parallel Mechanism with Direct Compliance Control.", IEEE, January 1, 1997, pp. 1753-1758.	
	B441	ROOS et al., "Abstract of Nanoimprint Lithography with a Commercial 4 Inch Bond System for Hot Embossing", Proceedings of SPIE, October 1, 2001, Vol. 4343, pp. 427-435	
	B442	ROOS et al., "Nanoimprint Lithography with a Commercial 4 Inch Bond System for Hot Embossing.", Proceedings of SPIE, October 1, 2001, Vol. 4343, pp. 427-435.	
	B443	RUCHHOEFT et al., "Patterning Curved Surfaces: Template Generation by Ion Beam Proximity Lithography and Relief Transfer by Step and Flash Imprint Lithography.", Journal of Vacuum Science and Technology, pp. 1-17. 11/12/1999	
	B444	SAGIV, "Organized Monolayers by Absorption. 1. Formation and Structure of Oleophobic Mixed Monolayers on Solid Surfaces.", Journal of American Chemical Society/102:1, January 2, 1980.	
	B445	SCHEER et al., "Problems of the Nanoimprinting Technique for Nanometer Scale Pattern Definition.", J. Vac. Sci. Techno. B., November 1, 1998, pp. 3917-3921.	

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	B446	SLOCUM, "Precision Machine Design: Macromachine Design Philosophy and Its Applicability to the Design of Micromachines.", Micro Electro Mechanical Systems, February 4, 1992.	
	B447	SOWAH, "Diamond Used to Break the Mould [online].", [Retrieved on Sept. 2, 2003.] Retried from the Internet: <URL: <a href="http://eetuk.com/showArticle.jhtml?articleID=19203691">http://eetuk.com/showArticle.jhtml?articleID=19203691</a> >., 9/18/02.	
	B448	SRINIVASAN et al., "Alkyltrichlorosilane-Based Self-Assembled Monolayer Films for Stiction Reduction in Silicon Micromachines.", Journal of Microelectromechanical Systems, June 1, 1998, Vol. 7, No. 2, p. 252-260.	
	B449	STEWART, "A Platform With Six Degrees of Freedom.", Proc Instn Mech Engrs, May 28, 1965, Vol 180, Pt1, No. 15, pp. 371-378.	
	B450	STIX, "Getting More from Moores", Scientific American, 4/2001.	
	B451	TAJBAKSH et al., "Three-Degree-of-Freedom Optic Mount for Extreme Ultraviolet.", American Society for Precision Engineering, January 1, 1998, pp. 359-362.	
	B452	TANIKAWA et al., "Development of Small-sized 3 DOF Finger Module in Micro Hand for Micro Manipulation.", Proc. of IEEE, March 1, 1999, Intl. conf. on Intelligent Robots and Systems, pp. 876-881.	
	B453	TOMITA et al., "A 6-axes Motion Control Method for Parallel-Linkage-Type Fine Motion Stage.", JSPE-58-04, pp. 118-124., 11/11/2002	
	B454	Translation of Japanese Patent 02-24848, January 26, 1990.	
	B455	Translation of Japanese Patent 02-92603, April 3, 1990.	
	B456	TRILOGY SYSTEMS, "Linear Motors 310.", <a href="http://www.trilogysystems.com">www.trilogysystems.com</a> , January 1, 2001.	

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	B457	UCHIDA et al., "A Mask-to-Wafer Alignment and Gap Setting Method for X-ray Lithography Using Graftings.", Journal Vacuum Science Technology, November 1, 1991, B 9 (6), pp. 3202-3206.	
	B458	US Application No. 09/698,317, Filed 10-27-2000, CHOI et al., "High Precision Orientation Alignment and Gap Control Stages for Imprint Lithography Processes."	
	B459	US Application No. 10/463,396, Filed 06-17-2003, CHOI et al., "Method to Reduce Adhesion Between a Conformable Region and a Pattern of a Mold."	
	B460	US Application No. 10/614,716, Filed 07-07-2003, SREENIVASAN et al., "A Conforming Template for Patterning Liquids Disposed on Substrates."	
	B461	US Application No. 10/687,519, Filed 10-16-2003, TRUSKETT et al., "Low Surface Energy Templates."	
	B462	US Application No. 10/687,562, Filed 10-16-03, CHERALA et al., "Applying Imprinting Material to Substrates Employing Electromagnetic Fields."	
	B463	US Application No. 10/760,821, Filed 01-20-2004, SREENIVASAN et al., "Method for Concurrently Employing Differing Materials to Form a Substrate."	
	B464	US Application No. 10/785,248, Filed 02-24-2004, CHOI et al., "A Method to Control the Relative Position Between a Body and a Surface."	
	B465	US Application No. 10/788,700, Filed 02-27-2004, SREENIVASAN et al., "Full-Wafer or Large Area Imprinting with Multiple Separated Sub-Fields for High Throughput Lithography."	
	B466	US Application No. 10/864,214, Filed 6-9-04, SREENIVASAN et al., "An Imprint Lithography System to Produce a Light to Impinge upon and Polymerize a Liquid in Superimposition with Template Overlay Marks."	
	B467	US Application No. 60/394,458, Filed 07-08-2002, SREENIVASAN et al., "Method and Apparatus for Whole Wafer Planarization using Optical Flats and Light Curable Liquids."	

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	B468	US Applications No. 10/616,294, Filed 07-09-2003, CHOI et al., "Systems for Magnification and Distortion Correction for Imprint Lithography Processes."	
	B469	VANDERBILT, "VU9730 Specifications for Improved Flexure Device.", Vanderbilt University Office of Transfer Technology, 101, 25, 192-199, 01/01/2003.	
	B470	WANG et al., "Passive Compliance versus Active Compliance in Robot-Based Automated Assembly Systems.", Industrial Robot, January 1, 1998, Vol. 25, No. 1, pp. 48-57.	
	B471	WHITE et al., "Novel Alignment System for Imprint Lithography.", J. Vac. Sci. Technol. B 18(6), November 1, 2000, pp. 3552-3556.	
	B472	WILLIAMS et al., "Six Degree of Freedom Mag-Lev Stage Development.", SPIE, January 1, 1997, Vol. 3051, pp. 856-867.	
	B473	WU, "Large Area High Density Quantized Magnetic Disks Fabricated Using Nanoimprint Lithography.", J. Vac. Sci. Technol., November 1, 1998, B 16(6), pp. 3825-3829.	
	B474	XIA et al., "Soft Lithography.", Angew. Chem. Int. Ed., January 1, 1998, pp. 551-575.	
	B475	XIA et al., "Soft Lithography.", Annu Rev. Mater. Sci., 1998, 28: 153-184.	

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